CP052
CHARACTERIZATION OF TOMATO AND WINERY BY- PRODUCTS

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Over the last years, special attention has been given to the use of natural compounds from food industry byproducts and their conversion/incorporation into biofuel, food ingredients, nutraceuticals and other added value bio-products [1]. Phenolic compounds, found in several agro-food byproducts, have been associated with an array of interesting biological effects such as antioxidant capacity and antimicrobial properties. Wine (grape pomace and stalks) and tomato industry byproducts contain a wide range of potential bioactive compounds and studies carried out in vivo and in vitro over the last few years have shown the beneficial effects of administering these bioactive compounds. [2]. As such, in this work tomato and winery by-products were submitted to a preliminary chemical characterization in order to gather some insights into their composition, in terms of dietary fiber and macromolecular fractions (hemicelluloses, cellulose, lignin and pectin). This characterization completed with the definition of the most interesting compounds to be targeted for extraction, fractionation and valorization in subsequent activities aiming at their integrated valorization. Overall tomato byproducts, which were measured in two samples respectively, illustrated 69.81% and 25.53% fiber content and also winery byproducts whose samples were measured in two white and red grapes illustrated 6.48% and 4.68% fiber content, making them excellent candidates for nutraceutical, medical, and food applications. They are also good sources of lignin, cellulose, and hemicellulose and which makes them an interesting source for the development of new environmentally friendly composites.

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